

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
12 July 2001 (12.07.2001)

PCT

(10) International Publication Number
WO 01/49806 A1

(51) International Patent Classification⁷: C09K 17/14

(21) International Application Number: PCT/KR00/01537

(22) International Filing Date:
27 December 2000 (27.12.2000)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
1999/67746 31 December 1999 (31.12.1999) KR
2000/82085 26 December 2000 (26.12.2000) KR

(71) Applicant (for all designated States except US):
LG CHEMICAL LTD. [KR/KR]; LG Twin Tower,
Yido-dong 20, Yongdungpo-ku, Seoul 150-721 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SON, Se-Hwan [KR/KR]; LG Apt. 8-405, Doryong-dong, Yousung-ku, Taejeon-city 305-340 (KR). KIM, Ok-Hee [KR/KR]; LG Dormitory 323, Doryong-dong, Yousung-ku, Taejeon-city

305-340 (KR). YOON, Seok-Hee [KR/KR]; Cheongsol Apt. 308-613, Songkang-dong, Yousung-ku, Taejeon-city 305-503 (KR). KIM, Kong-Kyeom [KR/KR]; 301, Jeonmin-dong, 390-9, Yousung-ku, Taejeon-city 305-390 (KR). LEE, Youn-Gu [KR/KR]; Seokyo-dong, 247-184, Mapo-ku, Seoul 121-210 (KR). BAE, Jae-Soon [KR/KR]; LG Yeollip 301, Doryong-dong 388-11, Yousung-ku, Taejeon-city 305-340 (KR).

(74) Agent: KIM, Seong-Ki; 9th Teheran Bd., 825-33, Yoksam-dong, Kangnam-ku, Seoul 135-080 (KR).

(81) Designated States (national): JP, US.

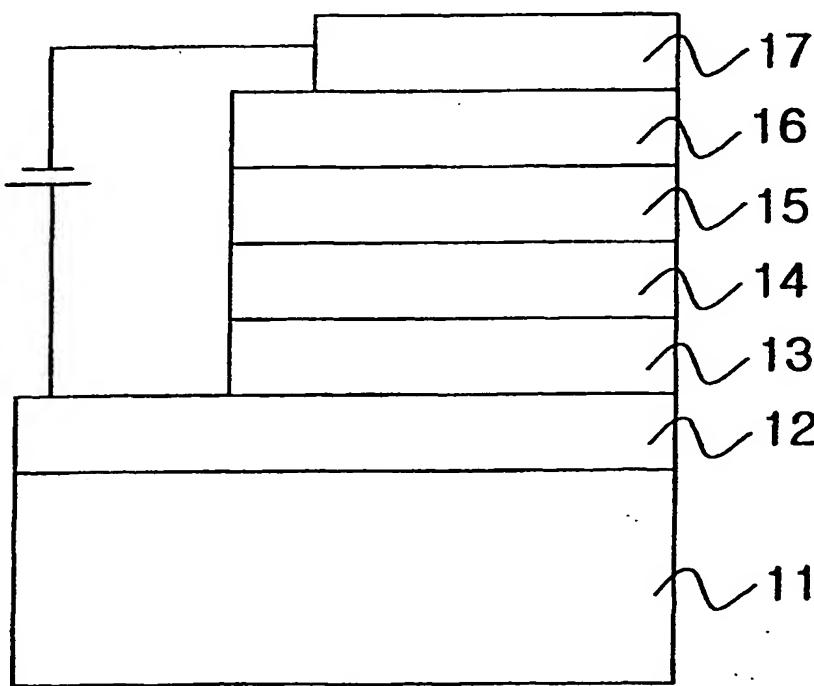
(84) Designated States (regional): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR).

Published:

— With international search report.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ELECTRONIC DEVICE COMPRISING ORGANIC COMPOUND HAVING P-TYPE SEMICONDUCTING CHARACTERISTICS



(57) Abstract: The present invention relates to electronic devices comprising an organic compound acting to inject or transport holes with p-type semi-conducting characteristics. The present invention provides for electronic devices comprising at least one or more layers selected from a group composed of a hole injecting layer, a hole transporting layer, and a hole injecting and transporting layer which comprises hexaaazatriphenylene based organic compound represented by chemical formula (1), wherein the devices can use low drive-voltage, and can improve a light-emitting life.